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ABSTRACT

This report provides formative-evaluation information about the processes followed by Florida's Orange County Public Schools (OCPS) to comply with national, state, and local governmental environmental regulations. Specifically, the report examines the effectiveness of the Environmental Compliance (EC) team, which monitors OCPS response to governmental mandates and stakeholders' concerns. An overall conclusion is that the EC team is successful in monitoring OCPS responses. As often as possible, the team acts in a proactive manner to correct situations prior to the actual decree of governmental mandates and laws, which prevents penalties and saves money. Specific findings and recommendations are offered for the following 13 areas: program objectives, operational guidelines, reporting procedures, building-level administrator role, recordkeeping procedures, school operations, OCPS personnel perceptions of the EC team, team cooperation with OCPS personnel and students, compliance procedures, timeliness, EC team needs, degree of staff development, and costs associated with environmental compliance. (LMI)

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ENVIRONMENTAL COMPLIANCE

PROGRAM EVALUATION REPORT August 1992

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ENVIRONMENTAL COMPLIANCE PROGRAM

PROGRAM EVALUATION

Executive Summary

Prepared by Diane Färdig, Ph.D.

August 1992

PURPOSE

The purpose of program evaluation is to provide formative evaluation information to decision makers about the processes followed by the OCPS to comply with national, state, and local governmental environmental regulations.

PROGRAM DESCRIPTION

The OCPS is virtually the size of a small city, with 122 schools serving over 123,000 students. There are ancillary centers such as the ELC, Transportation, and Facility Services. The system owns 2,770 acres of property and has over 19,000 employees. The federal, state, and local governments legislate certain environmental compliance mandates that protect students, personnel, buildings, and land. The OCPS is responsible for compliance, just like any municipality. Environmental legislation is on the increase. As an example, the State of Florida is now requiring permits for discharge from parking lots, and the testing of water that runs off the parking lots during rainfall. This year schools are exempt from the parking lot permit and testing, but experts expect that the district will soon be required to comply with this regulation.

The Environmental Compliance team is responsible for ensuring that the OCPS complies with local, state, and federal legislation that mandates certain environmental procedures and laws. Compliance is intended to protect all persons from known hazards; in addition, compliance may protect the school system from financial liability. The team responds to legislation and to requests from school and district teams who report possible hazardous conditions. The team is proactive in matters regarding the environment such as recycling aluminum, paper and other products.

OVERALL CONCLUSION

The Environmental Compliance (EC) team is successful in monitoring the OCPS response to governmental environmental mandates and concerns by OCPS parents, students and personnel. As often as possible the team acts in a proactive manner to correct situations prior to the actual decree of governmental mandates and laws. This proactive stance conserves dollars and prevents fines and other penalties. The program evaluation process identified certain program modifications that should enhance the processes and results of environmental compliance projects.

EVALUATION QUESTIONS, FINDINGS, AND RECOMMENDATIONS

This section contains the findings and recommendations relative to the evaluation questions.

1. **Are the program objectives appropriate as determined by literature reviews and the needs of the OCPS?**

Findings

The operating objectives of the Environmental Compliance team are appropriate according to a review of related literature, comparison with objectives of similar agencies, and the needs of the OCPS. Certain agencies such as the Department of Environmental Regulation have more proactive objectives, including water conservation and management.

The OCPS Environmental Compliance operating objectives are oral and not in writing.

Recommendations

The operating objectives should be written and made available to all those who have any responsibility for environmental compliance in the OCPS (e.g., Facility Services). Consideration may be given to including additional proactive environmental compliance objectives such as water management.

2. **Are there satisfactory operational guidelines that include the program's objectives and are they available to all personnel who have responsibility for environmental compliance?**

Findings

The Environmental Compliance team is aware of, and follows program guidelines. Prescribed guidelines for mandated programs, which provide detailed sequence and procedures, are provided to environmental compliance personnel. Operating guidelines are not in written form. Case studies and interviews with personnel who work with the environmental compliance team indicate that the team consistently follows these guidelines.

Other OCPS personnel, who may have some degree of responsibility for environmental compliance (e.g., other Facility Services teams), do not have environmental compliance guidelines.

The present guidelines are functional to a considerable degree and reflect many of the acceptable practices found in related literature and guidelines of similar agencies. However, the guidelines do not provide effective procedures for all situations. In particular, the guidelines do not address communication between all parties (e.g., the person reporting the concern or problem, the Environmental Compliance team member who responds, the OCPS team members who are responsible for correcting the problem). The guidelines do not provide an accountability system that requires the Environmental Compliance team to monitor

all environmental projects. The guidelines do not ensure that the Environmental Compliance team can make certain that all environmental compliance corrections are made.

Recommendations

Consideration should be given to developing a management plan that outlines the operating procedures for environmental compliance. Consideration should be given for adding communication guidelines that ensure communication between and among all personnel responsible for environmental compliance (e.g., Planning, Maintenance, Energy Management Services). Consideration should be given to expanding the use of contracted services to correct environmental compliance problems (see question number 7).

3. **Are there satisfactory procedures available to all OCPS personnel for reporting work site environmental compliance concerns?**

Findings

The EC team is disseminating and communicating the procedures for reporting worksite environmental compliance concerns to all OCPS personnel. Personnel need to know the procedures for reporting concerns so that they can participate constructively in the process (e.g., call again for help if nothing has happened). There are indications that the lack of procedures has hindered the efficiency of operations and OCPS understanding of the scope of environmental compliance.

Recommendations

Consideration should be given to developing a communications plan with the assistance of the Community Relations team.

Priority consideration should be given to developing a concise document, perhaps in checklist form, that includes procedures for reporting worksite environmental concerns. This document should be made a part of faculty handbooks and provided to team leaders. This document may be used in staff development (see question number 12).

4. **What are the responsibilities of the building level administrator for complying with local, state, and federal environmental guidelines?**

Findings

Principals prefer that facility personnel be responsible for compliance with environmental compliance and safety personnel reviewing building and renovation plans to ensure environmental and safety compliance. Principals would appreciate a videotape outlining major environmental compliance issues to increase their awareness of environmental compliance. Environmental Compliance personnel would like to see principals and assistant principals become environmental compliance school contacts.

Recommendations

Consideration should be given to asking the safety contact at schools and other worksites to function as the environmental compliance contact. Consideration should be given to developing a videotape in cooperation with instructional media, that would outline the responsibilities of the environmental compliance contact person.

5. **Are the operational procedures used by the Environmental Compliance team adequate to ensure minimal disruption to the daily routine of schools and offices?**

Findings

Results of case studies, interviews and records indicate that when the Environmental Compliance team is in control over corrections, there is minimal, and sometimes no, disruption of normal school activities and routines. In cases where there was disruption of normal school operations, the Environmental Compliance team did not have control of corrections.

Recommendations

Consideration should be given to allowing the Environmental Compliance team the option of contracting for services if the environmental correction has not been completed by a date agreed to by the Environmental Compliance team and the team responsible for correcting the problem.

6. **What record keeping procedures are used to ensure adequate documentation for proof of compliance?**

Findings

A number of records are maintained by the Environmental Compliance team as a result of federal, state and local environmental regulations. All these records are required by other agencies. The team has never been cited for failure to keep adequate records.

There is no single document that shows the overall process of the jobs that are a result of an internal complaint (e.g., origin of the complaint, response by the EC team, response by contractor or Facility Services teams, and final results). The need for such a system is documented in evaluation questions three, five, and seven. A form letter has been developed that summarizes the status of the environmental compliance concerns reported to the EC team.

Recommendations

Consideration should be given to developing a dual record keeping system and communication system that documents the environmental compliance investigation process and informs the complainant of progress toward solving the problem.

Consideration should be given to consulting with the OCPS Records Management team to determine what records must be kept and for how long.

Consideration should be given to consulting the E-Mail managers to determine the usefulness of this tool in record keeping and communication.

7. What are the perceptions of the OCPS personnel who have been served by the Environmental Compliance team?

Findings

Perceptions of the Environmental Compliance team vary based on personal experience in working with the team. For the most part, opinions of OCPS personnel are positive about the team if they have worked directly with the team. Personnel who have not worked with the team, or who have had not had environmental problems corrected, are not as positive. The team may have an identity problem with OCPS personnel who have had an environmental problem and not had it fixed: personnel interviewed associated the lack of a correction with the Environmental Compliance team, rather than the team that was responsible for the correction.

Recommendations

Consideration should be given to developing a dual record keeping and communication system that informs the complainant of the environmental compliance investigation process and the progress being made toward completion. Consideration should be given to allowing the Environmental Compliance team the option of contracting for services if the environmental correction has not been completed by a date agreed to by the Environmental Compliance team and the team that is responsible for correcting the problem.

8. How do OCPS personnel and students cooperate to identify, label, store, and dispose of hazardous materials?

Findings

The Environmental Compliance team supports and cooperates with secondary science instruction by providing staff development and news updates and by assisting in disposing of hazardous and outdated materials from labs. The team also supports postsecondary institutions by assisting with disposal of hazardous waste and waste water disposal. Environmental Compliance is not involved in elementary science projects at the time of the evaluation.

Environmental Compliance also supports and cooperates with other district teams to expeditiously address projects that involve identification, storage or removal of chemicals. Environmental Compliance monitors the conditions at various sites (e.g. chemical runoff at a transportation site). Environmental Compliance responds to calls from schools and other facilities to remove hazardous waste and waste water. Environmental Compliance contracts the disposal of hazardous waste and monitors compliance.

Recommendation

Considerations should be given to allowing Environmental Compliance a discretionary fund to solve problems that cannot be foreseen and must be solved expeditiously.

9. **How does the Environmental Compliance team ensure that EPA, OSHA, State DOE, and other governmental laws and procedures are followed in a consistent and timely manner throughout the district?**

Findings

The Environmental Compliance team appears to ensure that the EPA, OSHA, Florida DOE, and other governmental laws and procedures are followed in a consistent and timely manner when the actions related to these laws and procedures are under their control. Not all OCPS responses to federal, state, and local environmental mandates are under the control of the Environmental Compliance team. The Environmental Compliance team cannot require other teams to comply with what they request as a response to environmental concerns and issues.

Recommendations

Consideration should be given to allowing the Environmental Compliance team the option of contracting for services if the environmental compliance correction has not been completed by a date agreed to by the Environmental Compliance team and the team that is responsible for correcting the problem.

10. **Is there an adequate and timely response by the team to requests for assistance from schools and district locations?**

Findings

There is adequate response from the Environmental Compliance team to complying with environmental government mandates and to responding to environmental concerns of OCPS personnel. The present system does not ensure that the concerns reported by OCPS personnel and investigated by the Environmental Compliance team are corrected in a timely manner.

Recommendation

Consideration should be given to developing a record keeping system that provides for communication for all parties involved and would provide a way for EC team to monitor the progress of EC projects.

11. **Is the environment--including management, facility, equipment, supplies, material, and resources--satisfactory to meet the needs of the program and of the OCPS?**

Findings

For the most part, the environment--including management, facility, equipment, supplies, materials, and resources--are satisfactory to meet the needs of the program and the OCPS. The team could benefit from Meridian voice mail, a flexible budget for communicating and documenting environmental compliance projects.

Recommendations

The team would benefit from a computer software and equipment analysis by the Information Systems personnel and from the installation of voice mail for enhanced communication and accessibility.

Consideration should be given to allowing Environmental Compliance a discretionary fund to solve problems that cannot be foreseen and must be solved expeditiously.

12. To what extent is there adequate staff development for OCPS personnel responsible for environmental compliance?

Findings

The EC team can benefit from staff development updates especially in the areas of air quality and ventilation, asbestos abatement, removal of lead, removal of hazardous waste, and recycling projects. The team could benefit from staff development in forthcoming environmental issues such as the new EPA rule requiring oil filters to be disposed of as hazardous waste.

Other teams could benefit from staff development regarding trends and issues in environmental compliance. Staff development workshops might assist other Facility Services teams in developing a common response to environmental compliance mandates and regulations. Building level supervisors could benefit from basic information about environmental compliance.

Recommendations

When budget constraints are eased, consideration should be given to providing funds for the team so that they might participate in appropriate staff development and Information updates.

The Environmental Compliance team should be given the opportunity to provide environmental compliance staff development to teams within the Facility Services areas, especially planning, maintenance, and energy management.

Consideration should be given to developing a videotape in cooperation with instructional media, that would outline the responsibilities of the environmental compliance contact person (see evaluation question four).

13. What are the costs associated with environmental compliance and could these costs be reduced?

Findings

The vast majority of OCPS' 140 facilities participate in the EC recycling program. There is evidence that the program is popular with school personnel and students and that it is cost effective.

The methods used to monitor, store, and dispose of hazardous waste are based on cost avoidance. The efforts of the Environmental Compliance team have helped contain the expensive costs of hazardous waste disposal. Continuing to contain costs will depend not only on the Environmental Compliance team but also on other OCPS district and school-based team members.

The cost for asbestos abatement has been addressed realistically through hiring a consultant firm to provide quality control for the asbestos program and produce inspection reports required by the EPA. The district will avoid costs of \$125,000-200,000 this year. The district does not qualify for federal reimbursement for asbestos abatement according to qualifying criteria of percentage of county population under the poverty line.

The costs for correcting environmental compliance problems could be contained further through careful facilities planning and through efficient reaction by Facility Support teams. Reacting to problems in a timely manner can increase worker productivity and morale. A proactive stance can help avoid negative publicity and expensive fines plus ensure team credibility. Research related to environmental compliance supports a proactive approach as being cost effective.

Recommendations

In order to maintain its cost effectiveness, consideration should be given for ensuring that the OCPS Waste Reduction and Recycling Program is the primary recycling program for the district. Other specialized recycling programs should receive approval, prior to implementation, from the EC senior manager.

See evaluation question five regarding the recommendation for contracted services.

**Orange County Public Schools (OCPS)
Environmental Compliance
Program Evaluation Report**

PURPOSE OF EVALUATION

The purpose of program evaluation is to provide formative evaluation information to decision makers about the processes followed by the OCPS to comply with national, state, and local governmental environmental regulations.

RELATED DISTRICT GOALS

Goal 2: To staff schools and district-level departments with quality personnel and improve the job performance and job satisfaction of all employees

Goal 4: To improve the learning environment by providing appropriate support services to schools.

PROGRAM DESCRIPTION

The OCPS is virtually the size of a small city, with 122 schools serving over 123,000 students. There are ancillary centers such as the ELC, Transportation, and Facility Services. The system owns 2,770 acres of property and has over 19,000 employees. The federal, state, and local governments legislate certain environmental compliance mandates that protect students, personnel, buildings, and land. The OCPS is responsible for compliance, just like any municipality. Environmental legislation is on the increase. As an example, the State of Florida is now requiring permits for discharge from parking lots, and the testing of water that runs off the parking lots during rainfall. This year schools are exempt from the parking lot permit and testing, but experts expect that the district will soon be required to comply with this regulation.

The Environmental Compliance team is responsible for ensuring that the OCPS complies with local, state, and federal legislation that mandates certain environmental procedures and laws. Compliance is intended to protect all persons from known hazards; in addition, compliance may protect the school system from financial liability. The team responds to legislation and to requests from school and district teams who report possible hazardous conditions.

The team is proactive in matters regarding the environment such as recycling aluminum, paper and other products.

PURPOSE

The senior manager for Environmental Compliance is the person responsible for compliance (and is the district asbestos coordinator). His team consists of three specialists, three technical assistants (who report to the specialists) and one secretary. The senior manager reports to the director for Support Facility Services.

LEGAL MANDATES

This team's responsibilities are largely driven by legal mandates, and activities are based on the compliance requirements of each law. The major legislation impacting this program is described below:

- **Asbestos Hazard Emergency Response Act (AHERA)** This act was signed into law in 1986. AHERA required the Environmental Protection Agency (EPA) to provide a comprehensive framework for asbestos removal in elementary and secondary schools. The local education agency (LEA) has the responsibility for designating a district asbestos coordinator and following all EPA regulations.

Asbestos abatement is one of the most complicated environmental compliance mandates LEAs have, requiring detailed record keeping and training. The district depends on contracting with a legitimate asbestos removal company that follows EPA rules and regulations for inspection, worker training, and abatement. If the contractor does an improper job, the school district is liable. The consequences for not complying with AHERA include fines of \$5,000 per day.

- **The Occupational Safety and Health Administration (OSHA) Chemical Hazard Communication Standard of 1986** This law expanded the original law, which was for workers who manufactured products containing hazardous materials. The amendment extended the law to all workers who use these hazardous products in their jobs. This law requires employers to make sure that employees are aware of the hazardous chemicals they work with and of the safety precautions necessary for using the chemicals. OSHA regulations require that employers must make sure that every chemical hazard is identified, that the labels on products are adequate, and that a material safety data sheet (MSDS) exists for every hazardous material. OSHA also requires that employees be trained in how to use the MSDS.
- **U.S. Emergency Planning and Community Right-to-Know Act of 1986 (Superfund Amendments and Reauthorization Act, Title III)** This law is referred to as SARA, Title III and is also known as the community right-to-know law. The law requires that designated persons are aware of hazardous chemicals so that these can be stored in a proper place and container, and so appropriate emergency plans can be developed.
- **The Florida Right-to-Know Law (1986).** This law combines the requirements of the OSHA and EPA laws described above. The Environmental Compliance team is responsible for following all parts of the law except the employee training aspect, which is the responsibility of the Occupational Safety team. The team keeps the MSDS records and cooperates with local fire departments by notifying them of types, quantities and locations of all chemicals stored in OCPS facilities.
- **The Federal Hazard Communication Standard (1989)** addresses chemical safety issues such as hazardous waste disposal and employee safety. The Environmental Compliance team is responsible for disposal of electrical storage batteries and all hazardous materials found on school campuses.
- **The Resource Conservation and Recovery Act (1976)** was passed by Congress and amended with the Hazardous and Solid Waste Amendments of 1984 (40 CRF). This law included standards to regulate storage and disposal of waste, installation of

double liners, ground water monitoring, and establishing a program to regulate underground tanks. This law required EPA to establish further tank standards and procedures resulting in the Leaking Underground Storage Tanks Act (1988, 40 CFR Parts 280 and 281). Section 376.30, Florida Statutes details the district's responsibilities for stationary storage tanks. The Environmental Compliance team is responsible for checking all underground tanks for leaks and proper sealing, and removing faulty underground tanks. The team is also responsible for the Emergency Fuel Spill Operation Act procedures, including disposal of the hazardous waste. The team identifies, labels, and arranges for the removal of all unwanted 15-65 gallon drums. A vendor removes the containers and provides permits that assure legal disposal of the contents.

- The Rules of Florida Department of Education State Board of Education. Chapter 6A-2 Florida Administrative Code (1986) provides procedures, and building codes for educational facilities.

In addition to these mandates, the team has the following responsibilities:

- Conducts radon testing in schools and other sites and does follow-up testing. The team reports need for correction to buildings when tests indicate.
- Tests drinking water for lead, advises building-level administrators regarding procedures to reduce lead levels in drinking water and keeps all related records.
- Responds to indoor air quality concerns. Indoor air quality concerns may be caused by inadequate heating and air conditioning ventilation, improper ventilation systems, and even animal infestation of buildings (e.g., bats, pigeons). Approximately 80-90% of the causes of substandard air quality stem from insufficient make up air. Indoor air quality has been identified as a public concern that may significantly impact public school systems (Council of Educational Facility Planners, 1987) in the future.
- Coordinates district recycling efforts including developing and implementing recycling programs for aluminum, antifreeze, motor oil, and paper. The team coordinates the program for schools to recycle lunch trays, cardboard and other paper, and aluminum. It is also responsible for coordinating the collection, storage, and transportation of materials for recycling at more than 80 schools that are part of the recycling program. The team negotiates for contractors for recycling programs.
- Coordinates a silver recovery program that reduces the silver content in photographic fixer solutions to .5ppm or less, allowing these fluids to enter the sewage system safely.
- Maintains all records related to environmental compliance including requests for assistance and subsequent responses.

EVALUATION QUESTIONS

Evaluation Questions

The following evaluation questions, focusing on the environmental compliance process, will guide the evaluation:

1. Are the program objectives appropriate as determined by literature reviews and the needs of the OCPS?
2. Are there satisfactory operational guidelines that include the program's objectives and are they available to all personnel who have responsibility for environmental compliance?
3. Are there satisfactory procedures available to all OCPS personnel for reporting work site environmental compliance concerns?
4. What are the responsibilities of the building level administrator for complying with local, state, and federal environmental guidelines?
5. Are the operational procedures used by the Environmental Compliance team adequate to ensure minimal disruption to the daily routine of schools and offices?
6. What record keeping procedures are used to ensure adequate documentation for proof of compliance?
7. What are the perceptions of the OCPS personnel who have been served by the Environmental Compliance team?
8. How do OCPS personnel and students cooperate to identify, label, store, and dispose of hazardous materials?
9. How does the Environmental Compliance Team ensure that EPA, OSHA, State DOE, and other governmental laws and procedures are followed in a consistent and timely manner throughout the district?
10. Is there an adequate and timely response by the team to requests for assistance from schools and district locations?
11. Is the environment--including management, facilities, equipment, supplies, material, and resources--satisfactory to meet the needs of the program and of the OCPS?
12. To what extent is there adequate staff development for OCPS personnel responsible for environmental compliance?
13. What are the costs associated with environmental compliance and can these costs be reduced?

PROCEDURES

Data sources used to provide the basis for answering the 13 evaluation questions were as follows:

Program Contact

Mr. Steve Arcidiacono, the OCPS Senior Manager for Environmental Compliance, was consulted on a regular basis during the evaluation process. He also made available the three program specialists and team secretary who provided information.

Structured interviews

District and school-based OCPS personnel who had responsibility for environmental compliance or experience in working with environmental issues and projects were interviewed using a structured interview. Interviewees included principals, administrators, classified personnel and teachers.

Consultants

The researchers consulted with individuals who were responsible for environmental compliance of various agencies such as Reedy Creek Improvement District, Disney World, Orlando Utilities, Orlando Aviation Authority, Pinellas County School District, and Hillsborough County School District. The Florida Department of Environmental Regulation and the firm of Douglas Stone and Associates were consulted. The School Facilities Office, Maryland State Department of Education, supplied technical information.

Case Studies

Case studies were used to document the chronology of a variety of environmental compliance projects. Case studies were written following a structured case study history and represented a cross section of environmental compliance topics. The case studies are available for review in the Program Evaluation Office.

Records

Records of the Environmental Compliance team were examined and reviewed. Records included complaint logs, reports, memorandums, files, and AHERA required documentation.

Review of Related Literature and Legislation

An ERIC search and an Educational Research Service search were conducted and this literature was reviewed. The program contact supplied a number of current professional articles about environmental compliance. Federal and State legislation related to environmental compliance was reviewed.

OVERALL CONCLUSION

The Environmental Compliance team is successful in monitoring the OCPS response to governmental environmental mandates and concerns by OCPS parents, students and personnel. As often as possible the team acts in a proactive manner to correct situations prior to the actual decree of governmental mandates and laws. This proactive stance conserves dollars and prevents fines and other penalties. The program evaluation process identified certain program modifications that should enhance the processes and results of environmental compliance projects.

EVALUATION QUESTIONS FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This section contains the findings, conclusions, and recommendations relative to the evaluation questions.

1. Are the program objectives appropriate as determined by literature reviews and the needs of the OCPS?

Findings

Program objectives for Environmental Compliance are based on the federal, state, and local legislation that defines environmental laws and regulations. The team has developed operating objectives that guide the team in following legislated mandates, and these include the following:

1. Protect OCPS students and employees from hazards in the environment.
2. Ensure compliance with mandatory regulations from federal, state, and local government agencies.
3. Respond to environmental concerns from OCPS personnel in a timely manner.
4. Investigate and diagnose as accurately as possible the problem and cause.
5. Respond in a manner that causes as little disruption to the normal school/office routine as possible.
6. Refer environmental concerns, problems and probable causes to appropriate OCPS Facility Support teams.
7. Provide follow-up investigation to all requests.
8. Monitor chronic situations.
9. Prevent expensive corrections and lawsuits.
10. Determine adequacy of modifications and systems.
11. Keep OCPS management up to date with environmental mandate trends and issues.
12. Manage environmental compliance contracted services.

Review of related literature and the objectives of other environmental agencies indicates that these operating objectives are in line with the role of a large institution's or district's environmental compliance officer or team. The literature especially supports the notion of preventing health problems, expensive modifications, and costly lawsuits. The purpose and objectives of the Florida Department of Environmental Regulation (DER) reflects a proactive stance in protecting the environment. The DER is responsible for water regulation.

Conclusion

The operating objectives of the Environmental Compliance team are appropriate according to a review of related literature, comparison with objectives of similar agencies, and the needs of the OCPS. Certain agencies such as the Department of Environmental Regulation have more proactive objectives, including water conservation and management.

The OCPS Environmental Compliance operating objectives are oral and not in writing.

Recommendations

The operating objectives should be written and made available to all those who have any responsibility for environmental compliance in the OCPS (e.g., Facility Services). Consideration may be given to including additional proactive environmental compliance objectives such as water management.

2. **Are there satisfactory operational guidelines that include the program's objectives and are they available to all personnel who have responsibility for environmental compliance?**

Findings

The team does not have a handbook with guidelines, but does have functional informal operational guidelines. These guidelines include the following:

- timely response to district environmental concerns
- timely referral of environmental concerns to appropriate internal teams or to outside contractors
- timely response to federal, state, and local environmental mandates
- proactive stance regarding issues and trends in environmental compliance
- cost effectiveness planning
- service orientation towards OCPS personnel and environmental issues.

New mandates are announced through memorandums from the Florida DOE, OSHA, EPA, and other governing agencies. One of the team's major references is the Florida State Board of Education Administrative Rules. 6A-2 Educational Facilities. Included in this section are rules for all public education facilities, construction, renovation and remodeling, inspection, and capital outlay and debt service funds. Woven throughout the reference are rules and procedures for environmental compliance; 6A-2 does not include a separate section dealing exclusively with environmental compliance, so environmental compliance teams must sift carefully through all the procedures and separate out what is related to the environment. Regulations may overlap with of other teams in such areas as safety, construction and renovation.

It seems clear that "all personnel" who have responsibility for environmental compliance may include every employee and student. The environmental mandates affect all, although the ultimate legal responsibility for compliance is largely at an administrative level. Those responsible appear to be the Environmental Compliance team, the building level administrator, the OCPS teams responsible for correcting

compliance problems, and the contractor who may be responsible for correcting problems.

The operational guidelines include the following:

- Respond to mandates as quickly as possible, following all procedures as prescribed
- Respond to environmental concerns from OCPS personnel as soon as possible
- Provide diagnostic summary of reported concern to an appropriate team (e.g., maintenance north or south, energy management, construction, planning)
- Request that the team correct the problem
- Revisit the scene to determine if a correction has been made
- Keep records of mandate compliance as required by law.

The Environmental Compliance team has no policing powers and cannot levy fines or impose consequences for noncompliance by other teams. EPA, OSHA, DER and other agencies have enforcement powers and can levy fines and impose consequences.

Case studies documenting the response of the team to environmental concerns indicate that the team follows the guidelines listed above. The team is service oriented and attempts to solve as many environmental problems as possible. There are occasions when the team cannot solve the problem. In these cases the team must either hire a consultant to correct an environmental problem (e.g., removal of underground storage tanks, removal of asbestos, cleaning air conditioning systems to remove mold and mildew) or request other OCPS facility team members to correct the problems. The Environmental Compliance team does follow-up inspections, and attempts to monitor the situation until the problem is corrected. Review of case studies indicates that the use of contracted services can expedite the correction of certain environmental problems.

These guidelines are informal and unwritten. While these guidelines are worthy, they do not ensure complete communication and accountability among the person(s) who reported the problem, the person(s) who diagnosed the problem, and the person(s) who solved the problem. Ideally, each person in the process should be given information about the status of the project.

During the course of the evaluation, interviews were conducted with environmental compliance personnel representing such agencies as Orlando Utilities, Greater Orlando Aviation Authority, and Reedy Creek Improvement District to determine what procedures are followed. Most procedures are similar to those used by the OCPS Environmental Compliance team with the exception of Reedy Creek Improvement District and Disney World. In both cases, the person in charge of environmental compliance reports directly to a high ranking official who ensures that other teams make the appropriate environmental compliance correction. Other departments communicate with the environmental compliance department for even such activities as moving a trailer across the Disney property. This strong support of environmental compliance stems from two unfortunate environmental compliance issues that cost Disney money and harmed public relations. The environmental compliance persons at these two places found that such an organizational arrangements ensured that environmental compliance corrections were made in a timely manner and so far have avoided fines and/or negative publicity.

Interviews with members of the Council of Educational Facility Planners indicate a management plan, with immediate and long-range goals and objectives, is especially useful in managing air quality concerns. This management plan, with its guidelines,

assures positive public relations and a systematic way to deal with difficult issues. Interviews with other Florida school districts reveal that two large public school districts, Pinellas and Hillsborough, allow the environmental compliance contact person to contract out all corrections that are necessary including correction of sick building syndrome. Both districts report that this system has worked very well and that the corrections have been done in a timely and efficient manner.

Conclusion

The Environmental Compliance team is aware of, and follows program guidelines. Prescribed guidelines for mandated programs, which provide detailed sequence and procedures, are provided to environmental compliance personnel. Operating guidelines are not in written form. Case studies and interviews with personnel who work with the Environmental Compliance team indicate that the team consistently follows these guidelines.

Other OCPS personnel, who may have some degree of responsibility for environmental compliance (e.g., other Facility Services teams), do not have environmental compliance guidelines.

The present guidelines are functional to a considerable degree and reflect many of the acceptable practices found in related literature and guidelines of similar agencies. However, the guidelines do not provide effective procedures for all situations. In particular, the guidelines do not address communication between all parties (e.g., the person reporting the concern or problem, the Environmental Compliance team member who responds, the OCPS team members who are responsible for correcting the problem). The guidelines do not provide an accountability system that requires the Environmental Compliance team to monitor all environmental projects. The guidelines do not ensure that the Environmental Compliance team can make certain that all environmental compliance corrections are made.

Recommendations

Consideration should be given to developing a management plan that outlines the operating procedures for environmental compliance. Consideration should be given for adding communication guidelines that ensure communication between and among all personnel responsible for environmental compliance (e.g., Planning, Maintenance, Energy Management Services). Consideration should be given to expanding the use of contracted services to correct environmental compliance problems (see question number 7).

3. **Are there satisfactory procedures available to all OCPS personnel for reporting work site environmental compliance concerns?**

Findings

The Environmental Compliance team phone number is listed in the OCPS Directory. The team reports that many employees call the safety team or facilities first, and then are referred to environmental compliance.

The team has presented environmental compliance information to participants in the Preparing New Principals Program. The Environmental Compliance team also provides asbestos abatement awareness training to custodial staff.

Reporting procedures are not found in written form. The day-to-day unwritten procedures include that any OCPS employee, parent or other citizen can report environmental concerns. Such concerns will be treated on a "first come, first served" basis unless the problem requires priority attention (e.g., hazardous waste removal). The team investigates each concern, diagnoses the problem and refers the problem to a Facility Services team (e.g., Maintenance, Energy Management). It is that team's responsibility to make corrections. The Environmental Compliance team returns later (two days to two weeks) to reinspect and determine if corrections have been made. If corrections are not made, the team contacts the team in charge of corrections, requests action, then makes another follow-up inspection.

Interviews with administrators, managers, and teachers who have experience with environmental compliance and review of case studies of environmental compliance complaints indicate three major findings:

(1) When OCPS personnel deal directly with the Environmental Compliance team on a concern or project, these administrators and teachers remembered the procedures and continued to deal efficiently with the team (e.g., MFT, Wymore, West Orange and Apopka High School case studies). The majority of individuals who were interviewed had a positive perception of the team.

(2) The Environmental Compliance team may have an identity problem; many OCPS personnel do not know the scope of the Environmental Compliance team responsibilities. A number of OCPS personnel reported that an environmental compliance problem was longstanding before they found out which person to call about the problem. Most of the time, the Environmental Compliance team member is the only person they may meet with, and consequently come to the conclusion that this person will be back to correct the problem. If they do not see anyone, they often think that nothing was done. In these cases, their perceptions of the team were negative.

(3) The person who reports the problem most often never knows what happened as a response to the complaint (e.g., how it was treated, what corrections were made, if the corrections were adequate, whether the corrections were successful). These individuals don't know what their next procedural step should be, especially if the problem lingers (e.g., Zellwood Elementary case study).

Conclusions

The EC team is disseminating and communicating the procedures for reporting worksite environmental compliance concerns to all OCPS personnel. Personnel need to know the procedures for reporting concerns so that they can participate constructively in the process (e.g., call again for help if nothing has happened). There are indications that the lack of procedures has hindered the efficiency of operations and OCPS understanding of the scope of environmental compliance.

Recommendation

Consideration should be given to developing a communications plan with the assistance of the Community Relations team.

Priority consideration should be given to developing a concise document, perhaps in checklist form, that includes procedures for reporting worksite environmental concerns. This document should be made a part of faculty handbooks and provided to team leaders. This document may be used in staff development (see question number 12).

4. **What are the responsibilities of the building level administrator for complying with local, state, and federal environmental guidelines?**

Findings

The ultimate responsibility for complying with local, state, and federal environmental guidelines rests with the district school board. The school board delegates much of this responsibility to building level administrators and to district administrators.

The primary person responsible for the management of all school functions is the principal. Principals may delegate responsibilities to assistant principals and CRT's. Lead custodians may also be responsible for a number of functions related to the environment (e.g., hazardous waste, asbestos abatement).

Interviews with school administrators indicate that principals would prefer that Planning, Maintenance, and Facilities Construction teams be primarily responsible for compliance with 6A-2 regulations. These administrators see their list of responsibilities as already being very heavy and complex. Their opinion is that many environmental concerns could be handled more efficiently through careful planning of new construction and renovations, thus avoiding costly problems. Suggestions from these personnel include the following:

- Having a representative from the Environmental Compliance team involved in the planning of buildings and renovations to ensure environmental compliance issues are considered before problems arise.
- Providing environmental compliance awareness information to principals (brief, perhaps on videotape).

The Safety team part of Administrative Services has a safety contact in each school and reports that this person is usually the principal or assistant principal. This person is appraised of the results of the safety inspection and requests for safety corrections. The Safety team finds this a successful arrangement. The Environmental Compliance team would like to have a parallel contact in the schools. Other precedents for this school district contact include staff development and wellness representatives.

Conclusion

Principals prefer that facility personnel be responsible for compliance with environmental compliance and safety personnel reviewing building and renovation plans to ensure environmental and safety compliance. Principals would appreciate a videotape outlining major environmental compliance issues to increase their awareness of

environmental compliance. Environmental Compliance personnel would like to see principals and assistant principals become environmental compliance school contacts.

Recommendations

Consideration should be given to asking the safety contact at schools and other worksites to function as the environmental compliance contact. Consideration should be given to developing a videotape in cooperation with instructional media, that would outline the responsibilities of the environmental compliance contact person.

5. Are the operational procedures used by the Environmental Compliance Team adequate to ensure minimal disruption to the daily routine of schools and offices?

Findings

Operational procedures used to ensure minimal disruption to the daily routine of schools and offices seem to fall into two broad categories: (a) environmental compliance projects initiated and controlled by the team and (b) activities of the Environmental Compliance team that are part of the response to a concern of others.

Projects initiated and controlled by the team.

The Environmental Compliance team has an operating objective related to minimal disruption of routine. As a matter of normal scheduling, Environmental Compliance team members conduct radon and other testing during weekends and school breaks (e.g., winter holidays). There are occasions when the environmental compliance cannot schedule in this manner without the cooperation of other teams that may be conducting renovations (e.g., those that include asbestos removal as part of the renovation). If the renovation is not scheduled during a break, then neither can Environmental Compliance schedule its work during that break.

Facility Planning and Construction Services notify the Environmental Compliance team of renovations and the team determines if an environmental compliance issue is a part of the renovation or construction. Examples include the possible presence of friable asbestos as part of a renovation or underground storage tanks that might need to be removed from the area prior to installing parking lots or sidewalks.

Projects that are responses to complaints or concerns.

The operating procedures for responding to complaints made by school personnel and district team members include the following:

1. The complaint is made to the Environmental Compliance team (usually by telephone) and the concern is recorded on a log by the Environmental Compliance team (usually the team secretary).
2. A specialist is assigned to investigate the complaint. The team member makes an on-site visit and inspection and may also interview employees if possible and convenient.
3. An Environmental Compliance team member confirms the complaint and diagnoses probable cause of the problem.

4. An Environmental Compliance team member records the diagnosis and contacts the most appropriate support team(s), usually by telephone, as follows:

Energy Management
Plant Planning
Capital Improvements
Maintenance (north or south)

5. A team member conducts a follow-up inspection to determine if the problem still exists or if corrective action has taken place. The follow-up investigation is usually done from two days to two weeks after the referral to the support teams has been made.

6. If corrective action has been taken, it is noted. If corrective action has not been taken, the Environmental Compliance team or supervisor contacts the support team once more.

In many cases, there is no serious disruption to normal operations. Case studies indicate that when disruption of normal operations does occur, the cause may stem from the lack of full communication. As an example, a teacher who reported an environmental compliance concern may not have any idea if someone has investigated or made a correction (e.g., Zellwood Elementary case study). In one case an environmental problem has been documented since 1987 and has continued until 1992. Not solving the problem in a timely manner has prevented the program where the problem is located from expanding its operations.

C. Hazardous waste disposal procedures are detailed in federal, state, and local legislation (e.g., EPA). School sites have been used as illegal dump sites by individuals or companies required to dispose of hazardous waste. There is no effective way to catch these perpetrators and the Environmental Compliance team ensures that the waste is safely and legally removed from the school site as soon as possible after the offense is reported. In other cases (e.g., science labs) school personnel contact the environmental compliance office to pick up waste. Environmental Compliance stockpiles the waste in 55 gallon drums and when the amount is large enough contracts with a company to remove the waste.

If there is a spill (e.g., Hanging Moss) of an explosive or otherwise dangerous material, the material is removed immediately.

Requests are made by school personnel for removal of chemicals, or products that contain chemicals, such as batteries, light ballasts, or paints. Most chemicals, if they cannot be recycled, must be removed by a licensed hazardous waste company.

Large container inventory is a program used to reduce hazardous waste costs; each container on every worksite is identified and the contents are noted. If contents are not identified, and if rain water should enter, the costs are increased due to the need for analysis and disposal of the materials.

D. Operating procedures for recycling items include the following:

- Provision of bins for recycling aluminum cans on each floor of the ELC building

- Work with school personnel and students who volunteer to be part of the recycling effort (e.g., aluminum cans, paper, and lunch trays)
- Provision of bins for recycling at all schools with vending machines.

The team's experience in working with school personnel has been that a contact such as the science teacher allows for efficient recycling efforts.

E. Operating procedures for removing lead from plumbing lines that are used for drinking water include the following:

- Lines are flushed
- Lines are allowed to sit overnight
- The first draw of water in the morning is taken
- This draw of water is analyzed for lead.

If elevated lead levels are found in the drinking water, the school principal is notified. The environmental compliance team advises the principal of procedures necessary to reduce or eliminate lead levels.

The procedures for removing lead from drinking water include flushing the plumbing fixture 30-60 seconds prior to the start of each work day. A log for documenting the flushing is provided.

F. Operating procedures for asbestos removal require that several teams, including planning, construction management, and maintenance cooperate with environmental compliance in asbestos abatement. The Environmental Compliance team receives reports from the planning team that outlines building renovations or additions. The environmental compliance team evaluates the school for any construction plans that might require asbestos abatement. The following procedures are used by the Environmental Compliance team:

1. The senior manager for Environmental Compliance informs Facility Planning of the presence or absence of asbestos that must be abated.
2. The senior manager for Environmental Compliance informs the school principal of the presence of an asbestos abatement project.
3. The Environmental Compliance team must comply with the EPA 14 day notification prior to beginning any abatement project.
4. The senior manager for Environmental Compliance schedules the project and contracts for abatement services.
5. The Environmental Compliance team monitors the project so that the removal and disposal of the asbestos is done according to all applicable regulations.
6. The Environmental Compliance senior manager ensures that a professional follow-up inspection is conducted by a licensed asbestos consulting firm.

The range of responsibilities of the Environmental Compliance team is varied. The team must monitor such projects as the Orlando Utilities' Dr. Phillips storage tank stripping and painting project. Because of the proximity of a district school, the stripping and painting process had to be monitored to ensure that no paint or other chemicals came into contact with students. In another case, the senior manager is investigating the diagnosis by a physician of metal fume fever at a school directly across the street from a can factory.

Conclusions

Results of case studies, interviews and records indicate that when the Environmental Compliance team is in control over corrections, there is minimal, and sometimes no, disruption of normal school activities and routines. In cases where there was disruption of normal school operations, the Environmental Compliance team did not have control of corrections.

Recommendations

Consideration should be given to allowing the Environmental Compliance team the option of contracting for services if the environmental correction has not been completed by a date agreed to by the Environmental Compliance team and the team responsible for correcting the problem.

6. What record keeping procedures are used to ensure adequate documentation for proof of compliance?

Findings

The Environmental Compliance Team maintains an inventory of all chemicals used in the OCPS and where these chemicals are located. This information is kept on hand for use by the Fire Department for emergency action. The Material Safety Data Sheets (MSDS) are soon to be on computerized software. The Florida Right to Know Law requires that these sheets, which describe chemicals found in materials and their effects, be available at work locations.

The team must locate and record all large containers (e.g., barrels or drums) on every campus and determine through chemical analysis, their contents. This list goes back to the building level administrator for confirmation. This list is part of the management of hazardous waste.

The team maintains records of the recycling efforts of the various schools and the corresponding cost accounting records of those efforts. This information is used to determine the cost effectiveness of recycling as well as the growth of the program.

The team maintains all records of asbestos abatement according to AHERA procedures and other agency requirements. These records reflect the disposition of all building sites that contain asbestos and require a large amount of storage file space.

The team records all environmental concerns that are communicated to them by telephone. Specialists keep in-house records of the progress of environmental projects and environmental investigations. These records are kept in the unit. The log reflects the status of projects.

The team must maintain records of hazardous waste removal such as permits, transportation and disposal methods used to remove the waste. Records of radon testing are also maintained.

Lead Logs are kept at schools documenting line flushing. The Environmental Compliance team maintains records of all lead testing results, including memorandums to building level administrators.

There is no one document that shows the overall process of the jobs that are a result of an internal complaint (e.g., origin of the complaint, response by the EC team, response by contractor or Facility Services team, and final results). A form letter has been developed by the EC team that summarizes the status of environmental compliance concerns reported to the EC team.

The space available for storing records is limited. The team has limited access to computerized record keeping (see evaluation question 11).

Conclusion

A number of records are maintained by the Environmental Compliance team as a result of federal, state and local environmental regulations. All these records are required by other agencies. The team has never been cited for failure to keep adequate records.

There is no single document that shows the overall process of the jobs that are a result of an internal complaint (e.g., origin of the complaint, response by the EC team, response by contractor or Facility Services Teams, and final results). The need for such a system is documented in evaluation questions three, five, and seven. A form letter has been developed that summarizes the status of the environmental compliance concerns reported to the EC team.

Recommendations

Consideration should be given to developing a dual record keeping system and communication system that documents the environmental compliance investigation process and informs the complainant of progress toward solving the problem.

Consideration should be given to consulting with the OCPS Records Management team to determine what records must be kept and for how long.

Consideration should be given to consulting the E-Mail managers to determine the usefulness of this tool in record keeping and communication.

7. **What are the perceptions of the OCPS personnel who have been served by the Environmental Compliance team?**

Findings

The team is perceived as service oriented by the majority of teachers, school administrators and district managers interviewed during the evaluation process. The team is seen by many as empathetic and responsive to environmental and health concerns. As an example of cooperation, the Environmental Compliance team comes to annual secondary school science department chairperson meetings.

Interviews with OCPS personnel (i.e., teachers, principals, assistant principals) indicate that the Environmental Compliance team may have an identity problem among some personnel. It appears that if OCPS personnel have worked closely with the team over time they seem to understand the purpose of the team and the team's scope of responsibilities. Personnel with less experience with the team do not understand exactly what the team's responsibilities entail. As noted in Evaluation Question 2 and 3, this

identity problem may stem from the present guidelines and procedures used to respond to environmental concerns that are communicated by teachers and building level administrators. These guidelines and procedures are not communicated to all parties and often place the responsibility for correcting the environmental problem on a team that does not have environmental compliance as a priority duty.

Conclusions

Perceptions of the Environmental Compliance team vary based on personal experience in working with the team. For the most part, opinions of OCPS personnel are positive about the team if they have worked directly with the team. Personnel who have not worked with the team, or who have had not had environmental problems corrected, are not as positive. The team may have an identity problem with OCPS personnel who have had an environmental problem and not had it fixed: personnel interviewed associated the lack of a correction with the environmental compliance team, rather than the team that was responsible for the correction.

Recommendations

Consideration should be given to developing a dual record keeping and communication system that informs the complainant of the environmental compliance investigation process and the progress being made toward completion. Consideration should be given to allowing the Environmental Compliance team the option of contracting for services if the environmental correction has not been completed by a date agreed to by the Environmental Compliance team and the team that is responsible for correcting the problem.

8. How do OCPS personnel and students cooperate to identify, label, store, and dispose of hazardous materials?

Findings

Secondary Science

Interviews with the program consultant for secondary science, now retired, indicated that teachers take responsibility for identifying, labeling, and storing chemicals in labs. Teachers do not involve students in this process because students are not allowed to handle chemicals. The consultant reported cooperation from the Environmental Compliance team in inventory of materials, providing a list of the nature, quantity and location of all chemicals stored at each school. The program consultant contends that the primary problem in storing and using chemicals stems from the Florida DOE consultants at the state level; on one hand the officials in charge of permit approval may approve the construction or renovation of science rooms or labs, but later officials in charge of auditing and monitoring the same buildings after construction is completed will cite the school violations in code.

Elementary Science

The elementary science program consultant reported that she did not work with Environmental Compliance team at the time of the evaluation.

Secondary and Postsecondary Vocational Programs

Vocational programs, such as automotive mechanics, auto body, welding, and printing require that hazardous waste materials be removed from the school site in compliance with state and local mandates. Storage of materials such as paints and paint thinners must be done according to safe practices. The team has located chemicals that have been stored improperly and the team has removed and stored the chemicals properly. The custodial staff, responsible for storage of some materials, may not have received the necessary training in proper storage and disposal. The Environmental Compliance team works with the school faculty to ensure that hazardous wastes are disposed of according to local and state mandates. As an example, automobile mechanics and body labs are washed down daily in order to clean away oils and lubricants, fluids, dirt and grime, and chemicals. These materials cannot be disposed of directly into the sewage system and require special disposal systems.

Facilities

The Environmental Compliance team has worked to store excess office chemicals (e.g., duplicating fluid) at a safe site and also make the material available to offices that need the chemical to avoid ordering additional chemicals.

The Environmental Compliance team has worked with facility support personnel in collecting and storing hazardous materials until these can be removed from the district. This process depends on the cooperation of the Facility Support team members in using such devices as bins for separating PCB-containing ballasts from non-PCB-containing ballasts. During the evaluation, site observations confirmed that not all electricians were complying and the EC team regularly resorted the bins and ensured the bins were covered to protect the materials from rain.

Schools may find hazardous chemicals dumped on the grounds on a Monday morning, the result of illegal business and industry dumping activity. Despite that fact that the chemicals were never owned by the district, the Environmental Compliance team has the responsibility of disposing of these materials according to law. This is an expensive process involving contracted services.

Transportation services must dispose of grime and dirt from bus wash machines, as well as grease, oil, and other engine fluids. The Environmental Compliance team found a problem with the proper drainage of the wash and recommended new equipment that would provide proper disposal. Transportation did not have the management budget for this equipment so Environmental Compliance secured funds to bid for the cleaning equipment.

Problems such as the those with the vehicle washing equipment are indicative of the kinds of unforeseen problems that fall into the Environmental Compliance arena. The team cooperates in identifying the nature of the problem, determining the solution to the problem, and often times procuring the funding for the solution.

Conclusion

The Environmental Compliance team supports and cooperates with secondary science instruction by providing staff development and news updates and by assisting in disposing of hazardous and outdated materials from labs. The team also supports postsecondary institutions by assisting with disposal of hazardous waste and waste water

disposal. Environmental Compliance is not involved in elementary science projects at the time of the evaluation.

Environmental Compliance also supports and cooperates with other district teams to expeditiously address projects that involve identification, storage or removal of chemicals. Environmental Compliance monitors the conditions at various sites (e.g. chemical runoff at a transportation site). Environmental Compliance responds to calls from schools and other facilities to remove hazardous waste and waste water. Environmental Compliance contracts the disposal of hazardous waste and monitors compliance.

Recommendation

Considerations should be given to allowing Environmental Compliance a discretionary fund to solve problems that cannot be foreseen and must be solved expeditiously.

9. How does the Environmental Compliance team ensure that EPA, OSHA, State DOE, and other governmental laws and procedures are followed in a consistent and timely manner throughout the district?

Findings

The EPA, OSHA, Florida DOE, and other governmental agencies require that certain procedures be followed. The team operates according to these mandated procedures. EPA, OSHA, DER and other agencies can visit sites at any time to determine compliance. Government agencies supply memorandums and guidelines to the team. The senior manager for Environmental Compliance monitors the activities and plans of the asbestos abatement contracted services and keeps all records of those services.

The procedures are followed in a timely manner, with priority being given to critical laws and procedures. The district has not been cited for violations by EPA, OSHA, DEAR, or any other state, local or federal agency.

The team attempts to ensure that all OCPS teams remain in compliance with existing rules and regulations. Because noncompliance with these regulations will result in monetary fines and jail sentences it is imperative that other team leaders respond positively and quickly to the environmental compliance requests and recommendations made by the EC team.

Ensuring compliance with environmental mandates is the major function of the EC team. The EC team has a positive, proactive philosophy toward environmental compliance mandates, trends, and issues. Other Facility Services teams have as their major functions, routine maintenance, energy management, construction, and facility planning services.

Conclusion

The Environmental Compliance team appears to ensure that the EPA, OSHA, Florida DOE, and other governmental laws and procedures are followed in a consistent and timely manner when the actions related to these laws and procedures are under their control. Not all OCPS responses to federal, state, and local environmental mandates are under the control of the Environmental Compliance team. The Environmental Compliance team

cannot require other teams to comply with what they request as a response to environmental concerns and issues.

Recommendations

Consideration should be given to allowing the Environmental Compliance team the option of contracting for services if the environmental compliance correction has not been completed by a date agreed to by the Environmental Compliance team and the team that is responsible for correcting the problem.

10. Is there an adequate and timely response by the team to requests for assistance from schools and district locations?

Findings

A case study approach was used to answer this question. The case studies, representing a variety of compliance topics, revealed that the team appears to make adequate and timely response to requests for assistance from school and district sites. The team responds within two days, unless the situation is critical and then the team responds immediately. The team provides an adequate response by inspecting the area and diagnosing the problem. The team then determines if the situation requires an internal response from other facility services teams or if the situation requires the services and equipment of a consultant or contractor.

The team follows up the original inspection to determine if corrections have been made. Consultants and contractors are required to document their actions and to complete jobs in a timely manner.

At this time there is no system available for Facility Services teams to document or confirm corrections made regarding environmental complaints. The organizational structure is such that the Environmental Compliance team cannot ensure the response of other OCPS teams for assisting schools and other district locations in correcting environmental problems. The present record keeping system and organization does not provide for full reporting of corrective actions to environmental concerns.

Conclusion

There is adequate response from the Environmental Compliance team to complying with environmental government mandates and to responding to environmental concerns of OCPS personnel. The present system does not ensure that the concerns reported by OCPS personnel and investigated by the Environmental Compliance team are corrected in a timely manner.

Recommendation

Consideration should be given to developing a record keeping system that provides for communication for all parties involved and would provide a way for EC team to monitor the progress of EC projects.

11. Is the environment--including management, facilities, equipment, supplies, material, and resources--satisfactory to meet the needs of the program and of the OCPS?

Findings

Personnel

The senior manager for Environmental Compliance is the person responsible for compliance (and is the district asbestos coordinator). His team consists of three specialists, three technical assistants (who report to the specialists) and one secretary. The senior manager reports to the director for Support Facility Services.

Office

The team has offices at Chancellor Drive. The office has one Tandy 4000 computer (IBM compatible model) and now has E-mail. The office is soon to receive an in-house Macintosh SE so that asbestos plans and records on software from the Briggs Co. can be used. The Environmental Compliance telephone numbers are not equipped with Meridian voice mail. The senior manager for the EC has XVMX voice mail.

Expenditures

Each year the EC senior manager makes a detailed budget projection. During the year the budget allocation is monitored closely. The number of actual projects required always surpasses the number of projected projects.

The number of environmental compliance mandates has steadily grown as has the number of environmental complaints concerns from OCPS employees. This trend will continue. Examples include sampling materials for chemicals, testing water, measuring humidity and testing of what appeared to be, but was not, an oil sheen in the ditch after a parking lot renovation. This has resulted in unexpected expenditures.

Use of time

The time required to investigate complaints ranges from two hours to two days. The team spends additional time in follow-up trips to OCPS sites to determine the status of corrections. This time might be better spent in investigating new problems, or in addressing tasks involved in routine and proactive projects (e.g., recycling) if the corrections could be accomplished quickly. Time spent in follow-up might be reduced by a document that shows the overall progress of EC-related jobs (evaluation question six).

Personnel

The EC team has not grown since 1990, but the number of mandates has grown and the volume of EC requests has increased significantly.

Conclusions

For the most part, the environment--including management, facility, equipment, supplies, materials, and resources--are satisfactory to meet the needs of the program and the

OCPS. The team could benefit from Meridian voice mail, a flexible budget for communicating and documenting environmental compliance projects.

Recommendations

The team would benefit from a computer software and equipment analysis by the Information Systems personnel and from the installation of voice mail for enhanced communication and accessibility.

Consideration should be given to allowing Environmental Compliance a discretionary fund to solve problems that cannot be foreseen and must be solved expeditiously.

12. To what extent is there adequate staff development for OCPS personnel responsible for environmental compliance?

Findings

Environmental Compliance Team

The team receives most staff development on the job and must learn new regulations and skills as mandates occur. There is no formal staff development plan for the team. Team members must participate in such staff development as Asbestos Abatement Certification Course and Radon Program Training Courses.

The team benefits from information about systems and subject areas including air conditioning and heating, water management, air quality controls and standards, site planning, management of hazardous waste, and recycling.

Other Teams

Other teams responsible for environmental compliance include Maintenance, Capital Improvements, Facility Planning, Energy Management, and building-level administrators.

The Right to Know two-hour staff development, related to environmental concerns, is provided by the safety team.

Custodial personnel receive training in asbestos awareness, as required by AHERA, from the Environmental Compliance team. Maintenance, Energy Management, Planning and Capital Improvement personnel report that they learn about environmental compliance issues from the Florida DOE through memorandums and from 6A-2.

Building level supervisors (e.g., principals, assistant principals) have responsibility for environmental compliance. Assistant principals in the Preparing New Principals program receive some information from the Environmental Compliance team. The director of Training and Development Services recommends a videotape be created for principals about the basics in environmental compliance.

There is no formal staff development training provided by the Environmental Compliance team for teams within the areas of Energy Management, Maintenance, and Facility Planning. Interviews and case studies appear to indicate that these teams may benefit from staff development (e.g., seminars, briefings) showing the relationship of

environmental compliance mandates and regulations to all operations within Facility Services and the importance of services related to environment issues.

The OCPS director responsible for training new principals and staff development suggested that principals and assistant principals be provided with a videotape describing basic environmental compliance issues. The EC team is willing to provide staff development activities.

Conclusion

The EC team can benefit from staff development updates especially in the areas of air quality and ventilation, asbestos abatement, removal of lead, removal of hazardous waste, and recycling projects. The team could benefit from staff development in forthcoming environmental issues such as the new EPA rule requiring oil filters to be disposed of as hazardous waste.

Other teams could benefit from staff development regarding trends and issues in environmental compliance. Staff development workshops might assist other Facility Services teams in developing a common response to environmental compliance mandates and regulations. Building level supervisors could benefit from basic information about environmental compliance.

Recommendations

When budget constraints are eased, consideration should be given to providing funds for the team so that they might participate in appropriate staff development and Information updates.

The Environmental Compliance team should be given the opportunity to provide environmental compliance staff development to teams within the Facility Services areas, especially planning, maintenance, and energy management.

Consideration should be given to developing a videotape in cooperation with instructional media, that would outline the responsibilities of the environmental compliance contact person (see evaluation question 4).

13. **What are the costs associated with environmental compliance and could these costs be reduced?**

Findings

Environmental compliance costs are directly related to environmental mandates and the environmental concerns of OCPS parents, students, and personnel. The costs are often indirectly related to the manner in which the OCPS responds to mandates and concerns. As often as possible, the team responds in a proactive manner, with plans and deliberation; this appears to avoid reactions based on crisis situations.

Contracted Services

The environmental costs associated with asbestos abatement are mainly due to the procedures prescribed by AHERA. The asbestos abatement regulations require that the Orange County Public School complete three year reinspections of the asbestos-

containing building material in all OCPS facilities by mid-1992. The estimated costs for these inspections, which must be administered by a licensed asbestos consultant, were \$200,000-300,000.

The Environmental Compliance senior manager was allowed to contract facility inspection services with the Evans Environmental and Geological Consultants of Miami, professional and licensed asbestos abatement consultants in December, 1991. The inspector reports to the senior manager for Environmental Compliance. This person conducts asbestos inspections and develops asbestos abatement plans which are then reviewed and approved by the licensed consultant. The costs associated with this contractual agreement amount to about \$70,000. The cost avoidance from using the consulting firm is anticipated to be \$125,000-200,000. In addition, the consultant firm is providing technical information to the team (in the form of a summary of trade reports and weekly newsletters) that previously had been purchased by the Environmental Compliance team which should save the team approximately \$1200 annually. Overall, this appears to be an economical method for complying with AHERA regulations.

Costs were expended for asbestos abatement plans (one plan required for each district facility) by contracting with the Briggs Company. The plans submitted by the Briggs Company did not meet district specifications and, as a result, the firm and the OCPS were in litigation for some time. The OCPS ended its association with Briggs Company at the end of July 1992.

The EC team purchased a machine that cleans air conditioning units of mold and mildew, one of the most common causes of sick building syndrome. The cost of the unit was \$300.00 and since contracting the air conditioning cleaning by this method costs \$40.00 per unit, there should be quick recovery of the funds spent to buy the machine.

The EC team is cost conscious in buying equipment. As an example, the team needed a locator for underground storage tanks and found one for \$10.00 at the OCPS surplus warehouse.

Waste reduction and Recycling Program

Florida DOE regulations and OCPS policy requires recycling. The Environmental Compliance team operates the Waste Reduction and Recycling Program which began in 1991 with a pilot program involving 13 schools. The program was expanded after showing evidence of success and now more than 80 schools participate in the recycling program. Records of the cost associated with the program indicate clearly a trend in cost avoidance with the OCPS saving more than \$2,800 a month in trash removal costs. Administrators, teachers, and students support the program which not only recycles products, but cuts down on the number of trash dumpsters (reducing rental rates) and pickups (waste removal is charged by the number of pickups). Students learn responsible use of materials and protect the environment by reducing solid waste. The team presents each participating school with a plaque and provides a special program to encourage the participation of students.

Conclusions

The vast majority of OCPS' 140 facilities participate in the EC recycling program. There is evidence that the program is popular with school personnel and students and that it is cost effective.

The methods used to monitor, store, and dispose of hazardous waste are based on cost avoidance. The efforts of the Environmental Compliance team have helped contain the expensive costs of hazardous waste disposal. Continuing to contain costs will depend not only on the Environmental Compliance team but also on other OCPS district and school-based team members.

The cost for asbestos abatement has been addressed realistically through hiring a consultant firm to provide quality control for the asbestos program and produce inspection reports required by the EPA. The district will avoid costs of \$125,000-200,000 this year. The district does not qualify for federal reimbursement for asbestos abatement according to qualifying criteria of percentage of county population under the poverty line.

The costs for correcting environmental compliance problems could be contained further through careful facilities planning and through efficient reaction by facility support teams. Reacting to problems in a timely manner can increase worker productivity and morale. A proactive stance can help avoid negative publicity and expensive fines plus ensure team credibility.

A proactive stance on environmental issues appears to avoid costs, including fines, and place the district in a better position for reimbursement by governmental agencies. Research related to environmental compliance supports a proactive approach as being cost effective.

Recommendations

In order to maintain its cost effectiveness, consideration should be given for ensuring that the OCPS Waste Reduction and Recycling Program is the primary recycling program for the district. Other specialized recycling programs should receive approval, prior to implementation, from the EC senior manager.

See evaluation question 5 regarding the recommendation for contracted services.